

## Patent Abstracts of Japan

PUBLICATION NUMBER : 11340403  
PUBLICATION DATE : 10-12-99

APPLICATION DATE : 28-05-98  
APPLICATION NUMBER : 10146742

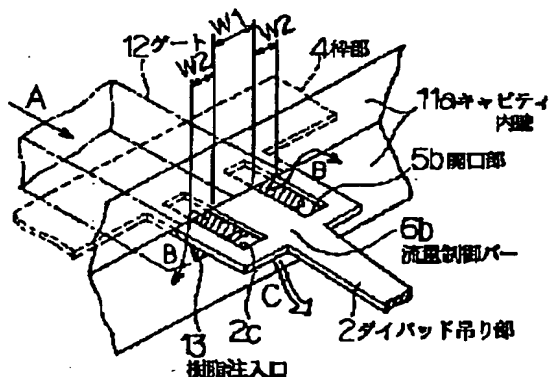
APPLICANT : SONY CORP;

INVENTOR : ABE HIROSHI;

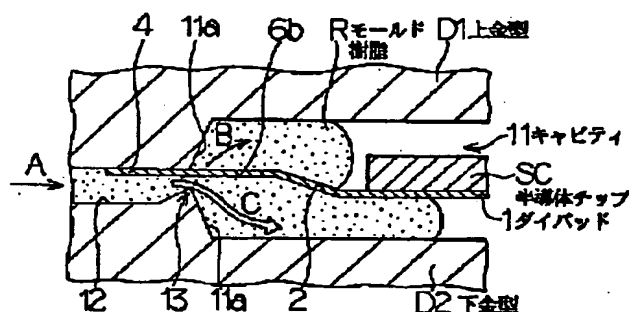
INT.CL. : H01L 23/50 B29C 45/02 B29C 45/14  
B29C 45/76 H01L 21/56 // B29L 31:34

TITLE : LEAD FRAME

(a)



(b)



**ABSTRACT :** PROBLEM TO BE SOLVED: To prevent the formation of voids and a warpage in a semiconductor package, which is increased further in the number of terminals and reduced in thickness by making the flowing profile of a molding resin in the cavity of a mold for injecting molding resin to be finely adjustable.

**SOLUTION:** A flow rate control means, which is capable of changing the flow rate distributing ratio of a molding resin R in the vertical direction of a die pad 1 is provided in an opening 5b, made in the base-side end section of a die pad hanging section 2 which connects the die pad 1 to a frame section 4. When a flow rate control bar 6b, which is formed simultaneously with the ordinary pattern of a lead frame, is provided as the flow rate control means, the quantity of the resin R flowing above the die pad 1 (in the direction shown by the arrow B) can be increased, if the width w1 of the bar 6b is made narrower to a certain extent, and the quantity of the resin R flowing below the die pad 1 (in the direction shown by the arrow C) can be increased, when a width w1 is made wider to a certain extent.

COPYRIGHT: (C)1999,JPO